Abstract

This paper deals with in developing an inventory model for time dependent decaying items as bread, food stuff, green vegetables and medicine etc. The rate of deterioration is time dependent and considers a linear function of time. Demand rate is stock dependent in linear form. It is a common phenomenon observed in the super market that a large pile of goods attracts more customers. Shortages are allowed and shortages are completely backlogged. The numerical example is given to illustrate the model developed. The model is solved analytically by maximizing the total profit.

**Index Terms**

Computer Science

Software Systems
Keywords
Inventory  EOQ Model  deteriorating items  stock dependent demand rate